

## UNITED STATES DEPARTMENT OF COMMERCE **Patent and Trademark Office**

COMMISSIONER OF PATENTS AND TRADEMARKS

Washington, D.C. 20231

ATTORNEY DOCKET NO. FIRST NAMED INVENTOR FILING DATE APPLICATION NO.

09/118,359

07/17/98

KELLER

MI22-587

**EXAMINER** 

021567 WELLS ST JOHN ROBERTS GREGORY AND MATKIN

SUITE 1300.

601 W FIRST AVENUE

SPOKANE WA 99201-3828

FSTRADA ART UNIT

PAPER NUMBER

2823

DATE MAILED:

10/16/01

Please find below and/or attached an Office communication concerning this application or proceeding.

MM91/1016

**Commissioner of Patents and Trademarks** 



# UNITED STATES EXPARTMENT OF COMMERCE Patent and Tradesark Office

Address: ASSISTANT COMMISSIONER FOR PATENTS

Washington, D.C. 20231

APPLICATION NO./	FILING DATE	FIRST NAMED INVENTOR /	ATTORNEY DOCKET NO.
CONTROL NO.		PATENT IN REEXAMINATION	

EXAMINER

ART UNIT PAPER

22

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

#### **Commissioner of Patents and Trademarks**

In response to applicant's telephone inquiry regarding the last Office Action, the following corrective action is taken. The period for reply of 3 MONTHS set in said Office Action is restarted to begin with the mailing date of this letter. A corrected copy of the last Office Action is enclosed.

George Fourson Primary Examiner

PTO-90C (Rev.3-98)

Art Unit: 2823

#### **DETAILED ACTION**

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

The Double Patenting rejection is withdrawn.

#### Claim Rejections - 35 USC § 102

Claims 1, 2, 7, 9, 41, 42 and 51-57 are rejected under 35 U.S.C. 102(e) as being anticipated by Araki et al.

The rejection is maintained as stated in the office action mailed 5/8/01 and as stated below.

With respect to claims 52-56, there is overlap between the recited floating gate thickness, the inner first portion thickness and the dopant concentration and those disclosed in the present invention.

Applicant argues that in claim 51, "providing conductivity enhancing impurity in the inner first portion to a greater concentration than conductivity enhancing impurity in the outer second portion wherein forming a floating gate over a substrate comprises: forming the inner first portion in contact with a gate dielectric" requires the portion of the inner first portion contacting the gate to be doped as recited. However, as stated in the office action mailed 5/8/01, the doped portion of the polysilicon layer (104) and the underlying portion could be characterized as an "inner first portion" as recited in claim 51.

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Applicant argues that the reference fails to provide enabling disclosure for any of claims 1, 2, 7, 9, 41, 42 and 51. However, the claims encompass the structure of Araki et al. for the reasons discussed above. Applicant's argument that the first layer is the layer immediately atop the gate dielectric is no well taken for the reasons described above.

Applicant argues that the recited dopant concentration is not obtained because the dopant will be diffused into a larger volume. However, as stated above and in the office action mailed 5/8/01, the doped portion could be characterized as the inner first portion for the purpose of rejection of claims 1, 2, 7 and 9 and claims 41, 42 and 51 do not require that the inner portion be uniformly doped which allows the doped layer and the underlying layer to be characterized as the "inner first portion".

Applicant alleges that the examiner does not respond to all arguments provided by applicant in previous amendments. However, applicant fails to identify a particular argument for which no response was proffered.

### Claim Rejections - 35 USC § 103

Claims 3-6, 8, 10-14, 25-31 and 43-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Araki et al. as applied to claims 1, 2, 7, 9, 41, 42 and 51-57 above, and further in view of the stated comments.

The rejection is maintained as stated in the office action mailed 5/8/01.

Art Unit: 2823

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle Estrada whose telephone number is 703-308-0729. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on 703-308-4918. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 (7724, 3431 and 3432) for regular communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

George Fourson Primary Examiner Art Unit 2823

MEstrada

October 5, 2001